

## A new *Homolophus* species (Opiliones: Phalangiidae) from Lenkoran zone in Azerbaijan

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**Abstract** — A new harvestman species *Homolophus azerbaijanicus* from the Lenkoran zone of Azerbaijan is described and compared with its nearest relative — *H. potanini* (Simon 1895). The diagnosis of the genus *Homolophus* Banks 1893 is revised to allow its distinctiveness from *Opilio* Herbst 1798.

**Key words** — Opiliones, Opilioninae, Azerbaijan, new species

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### Introduction

The genus *Homolophus* Banks 1893 currently includes approximately 20 species (Staręga 1964, 1978, 2003; Šilhavý 1967, 1972; Gricenko 1979, 1980; Cokendolpher 1987; Tsurusaki 1987; Tchemeris 2000; Tsurusaki et al. 2000). From Caucasus and in particular in Azerbaijan, the representatives of this genus were not known before. In the present paper, a new species of the genus *Homolophus* from Lenkoran zone of Azerbaijan is described.

Because there are some inconsistencies in clear definition of the closely related genera *Himalphalangium* Martens 1973, *Homolophus* Banks 1893 and *Opilio* Herbst 1798, it is necessary to give a new diagnosis of the genus *Homolophus*.

**Diagnosis.** A species group of Opilioninae characterized by having:

- 1) Anterior part of cephalothorax with groups of denticles which may be very dense; same denticles settle down on lateral sides of cephalothorax and on each side of eye tubercle;
- 2) Legs variable in length, mostly long, sometimes either short or very long;
- 3) Chelicerae usually normal, sometimes enlarged in males;
- 4) Palps in males with many denticles on femur and tibia, less on patella, none on tarsus (here a ventral row or elongate area of sensory granules);
- 5) Penis without lateral incisions or similar structures in the apical part of the shaft; shaft often flattened dorso-ventrally, particularly in distal part; glans cuneiform, in profile mostly triangular with rounded “lower” corner; stylus relatively long.

Within the genus *Homolophus*, the present new species belongs to the group of species related to *H. nordenskiöldi*

(L. Koch 1879) (North of European Russia to Mongolia and North Korea), *H. serrulatus* (Karsch 1881) (China), *H. potanini* (Simon 1895) and *H. thienshanensis* (Šilhavý 1967) (both from Central Asia). It has similar long legs but differs from all of them by its penis structure (and other details). Possibly most closely related is *H. potanini* — the differences are shown in a direct comparison below.

### Description

#### *Homolophus azerbaijanicus* sp. n.

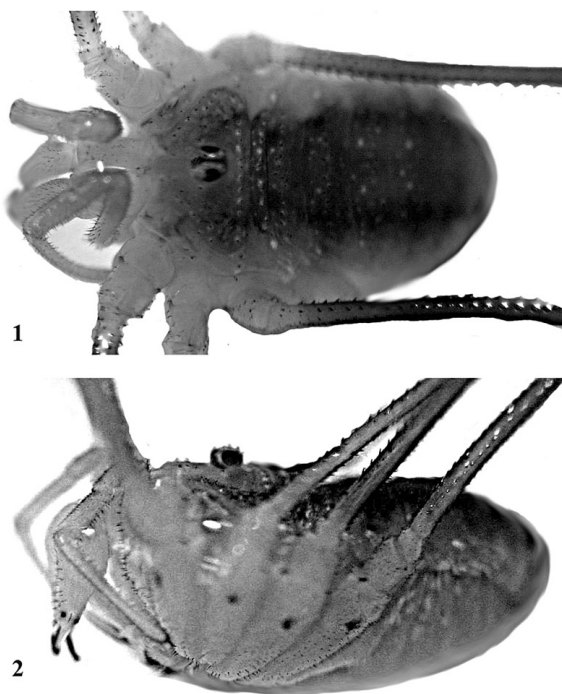
(Figs. 1–11)

Male (holotype). Body oviform, 4.5 mm long, 2.8 mm wide, slightly constricted between cephalothorax and abdomen (Figs. 1–3). Carapace in front of eye tubercle and on its lateral sides with a group of 17–19 black-tipped denticles. Dorsal surface around opening of odoriferous gland with a group of 6–7 similar denticles. Eye tubercle low, each eye ring with 5–6 small denticles. Free tergites of cephalothorax with double- or threefold rows of denticles. Abdominal tergites with irregular, double rows of denticles on rear borders. Venter and coxae with setae.

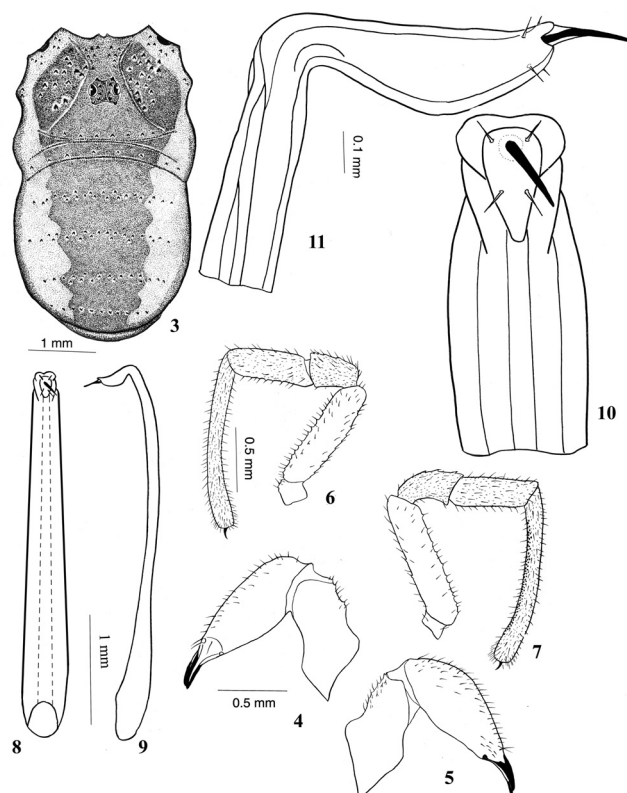
Chelicera (Figs. 4–5). Basal segment 2.2 mm long, dorsally with black-tipped tubercles and setae; distal segment 1.5 mm long, dorsally and laterally with setae only.

Pedipalp (Figs. 6–7). Femur ventrally with some small black-tipped tubercles. Patella and tibia covered with setae, tarsus with setae and ventrally with granules (basally 2–3 rows and distally a single row). Length of palpal articles: femur 1.26, patella 0.45, tibia 0.8, tarsus 1.5; total length 4.01 mm.

Legs long. Femora of all legs with longitudinal rows of tubercles and setae, other parts of legs with setae. Patellae, tibiae and metatarsi also with tubercles on ventral side and with setae. Length of legs: I 5.5 + 1.2 + 4.8 + 4.0 + 5.4 =



**Figs. 1–2.** *Homolophus azerbaijanicus* sp. n., male, holotype. Dorsal (1) and lateral (2) views of body.



**Figs. 3–11.** *Homolophus azerbaijanicus* sp. n., male, holotype. Body, dorsal view (3). Retrolateral (4) and prolateral (5) views of left chelicera. Retrolateral (6) and prolateral (7) views of left pedipalp. Dorsal (8) and lateral (9) views of penis. Dorsal (10) and lateral (11) views of glans.

21.0, II 10.2+1.6+9.6+3.4+18.6=43.4, III 5.6+1.4+4.8+3.8+11.2=26.6, IV 7.5+1.4+7.0+5.0+17.4=38.3 mm; BLI 2.060.

Penis (Figs. 8–11). Shaft broadened in the basal part and slightly narrowed distally. Glans with two setae on each side. Length of the shaft 3.5 mm, glans 0.38 mm, stylus 0.1 mm.

Coloration. Body light brown with a dark-brown saddle and numerous dark and light spots. Ventral side yellowish, every coxa with a distinctive dark round spot near its distal end. Legs, chelicerae and palps light brown. Penis also light brown.

Female unknown.

Etymology. Named after Azerbaijan, the country to which type locality of the species belongs.

Material. 1♂ (holotype): Azerbaijan, Lenkoran, Azfilial, 10–18. July 2005 leg. E. Guseinov (Zoological Institute,

Russian Academy of Sciences, Sankt-Petersburg). 1♂ (paratype): the same data; 1♂ (paratype), in the same locality, November 2006 leg. E. Guseinov (Zoological Institute, National Academy of Sciences of Azerbaijan, Baku).

Habitat. the species has been collected on forest litter.

Notes. This species most resembles *Homolophus potanini* (Simon) from Kazakhstan, Kyrgyzstan, and Tadjikistan. Diagnostic characters between the two species are as in Table 1.

Comparative material of *Homolophus potanini*. 1♂: Kazakhstan, Almaty prov., Butakovka, 16. June 2000 leg.

**Table 1.** Diagnostic characters between *Homolophus azerbaijanicus* sp. n. and *Homolophus potanini* (Simon 1895).

	<i>H. azerbaijanicus</i>	<i>H. potanini</i> <sup>1)</sup>
Body	4.5 mm long, covered with denticles, especially anterior part of cephalothorax; borders of cephalothorax with double to threefold rows of denticles (Figs. 1–3)	Mostly larger (up to 7.7 mm), denticles less numerous, borders of cephalothorax with one transverse row of small denticles (Šilhavý 1967: fig. 14)
Chelicerae	Dorsally with some small denticles on basal segment (Figs. 4–5)	Covered with setae (Šilhavý 1967: fig. 15)
Pedipalps	Femur covered basically with setae and some small denticles dorsally (Figs. 6–7)	Femur ventrally densely covered with small denticles dorsally and laterally with with setae (Šilhavý 1967: fig. 16)
Legs	Long and thin; length of legs — 21.0–43.4–26.8–38.3	Very long and thin; length of legs — 56.5–118.0–57.0–71.0 (Šilhavý 1967: 476)
Penis	3.5 long, glans triangular dorsally (Figs. 8–11)	2.8–3 mm long, glans rounded dorsally (Šilhavý 1967: figs. 17–19)

<sup>1)</sup> In Šilhavý (1967) this species appears under the name “*Opilio alması* Roewer”, a junior synonym of *H. potanini*.

A. A. Cherkashin. 1♂: Kazakhstan, environments of Almaty, Zailiyskiy Alatau Ridge, Bolshaya Almaatinka [river valley], ca. 2600–2900 m a.s.l., subalpine fir-wood, 30. Aug.–03. Sept. 1992 leg. K. Eskov (both: Zoological Museum of Moscow State University).

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#### References

- Cokendolpher, J. C. 1987. On the identity of the genus *Homolophus*: a senior synonym of *Euphalangium* (Opiliones: Phalangiidae). *Acta Arachnol.*, 35: 89–96.
- Gricenko, N. I. 1979. Materialy k faune senokoscev (Opiliones) Primorskogo kraya, pp. 124–132. In: Petrashevskaya V. T. (ed.). *Nazemnye chlenistonogie dal'nego Vostoka*, Vladivostok (Akademia Nauk SSSR).
- Gricenko, N. I. 1980. K faune senokoscev (Opiliones) Mongolii i sopredelnykh rayonov Kitaya i SSSR. *Nasekomye Mongolii*, 7: 553–565.
- Staręga, W. 1964. Materialien zur Kenntnis der ostasiatischen Weberknechte (Opiliones). I–IV. *Ann. Zool.*, 22: 387–410.
- Staręga, W. 1978. Katalog der Weberknechte (Opiliones) der Sowjet-Union. *Fragm. Faun.*, 23: 197–234.
- Staręga, W. 2003. On the identity and synonymies of some Asiatic Opilioninae (Opiliones: Phalangiidae). *Acta Arachnol.*, 52: 91–102.
- Šilhavý, V. 1967. Beitrag zur Kenntnis der Weberknecht-Fauna des Sowjetischen Zentral-Asien (Arach., *Opilionidea*). *Acta Entomol. Bohemosl.*, 64: 472–478.
- Šilhavý, V. 1972. Asiatische Arten der Gattung *Euphalangium* Roewer (Arachnida: Opiliones: Phalangiidae). *Senckenbergiana Biol.*, 53: 101–108.
- Tchemeris, A. N. 2000. Contribution to the knowledge of the Harvestman fauna in the Russian Far East and Eastern Siberia (Arachnida: Opiliones). *Arthrop. Sel.*, 9: 31–49.
- Tsurusaki, N. 1987. Two species of *Homolophus* newly found from Hokkaido, Japan (Arachnida: Opiliones: Phalangiidae). *Acta Arachnol.*, 35: 97–107.
- Tsurusaki, N., Tchemeris, A. N. & Logunov, D. V. 2000. Two new species of Opiliones from southern Siberia and Mongolia, with an establishment of a new genus and redefinition of the genus *Homolophus* (Arachnida: Opiliones: Phalangiidae). *Acta Arachnol.*, 49: 73–86.

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